



جامعة المستقبل
AL MUSTAQBAL UNIVERSITY

كلية العلوم قسم علوم الذكاء الاصطناعي

المحاضرة التاسعة

المادة : *Knowledge representation*

المرحلة : الأولى

اسم الاستاذ: م.م. عبدالله فاضل شبر

7- Script Representation

A script is a structured representation describing a stereotyped sequence of event in a particular context.

A script is **composed** of the following **components**:

- **Roles** are the actions that the individual participants perform.
 - **Props** or the “things” that make up the content of the script.
 - **Entry conditions** that must be true for the script to be called.
 - **Results** or facts those are true once the script has terminated.
 - **Scenes** which present temporal aspects of the script.
 - **Track** specific variation on more general pattern in the script.
-

Example1: Using script representation to represent someone having a meal at a restaurant.

Track “having a meal at a restaurant”

Roles

- Customer
- Waiter
- Cashier
- Owner

Props

- Tables
- Menu
- Food
- Money
- Bill

Entry conditions

- Customer is hungry
 - Customer has money
 - Owner has Food
-

Results

- Customer has less money
- Customer is not hungry
- Owner has more money
- Owner has less food

Scenes

Scene1: Entering

- Customer enters the restaurant.
- Customer looks at tables.
- Customer decides where to sit.
- Customer goes there and seated.

Scene2: Ordering

- Customer asks for menu.
 - Waiter brings it.
 - Customer chooses what to eat.
 - Customer orders that item.
-

Scene3: Eating

- Waiter brings the Food.
- Customer eats it.

Scene4: Paying

- Customer asks for the bill.
- Waiter brings it.
- Customer pays for it
- Waiter hands the money to the cashier.
- Waiter brings the balance amount.
- Customer leaves the restaurant

• ملاحظة: اي شخص من Role لم يظهر في Scene يجب ان يظهر في

Result و العكس صحيح.

Example2: Using script representation to represent robbing a bank.

Track “robbing a bank”

Roles

- Robber.
- Cashier.
- Bank Manager.
- Policeman.

Props

- Gun.
- Loot.
- Bag.
- Getaway car.

Entry Conditions

- Robber is poor.
 - Robber is destitute.
-

Results

- Robber has more money.
- Bank Manager is angry.
- Cashier is in a state of shock.
- Policeman is shot.

Senses

Sense1: getting a gun

- Robber goes to gun shop.
 - Robber chooses the gun.
 - Robber buys gun.
-

Sense2: Holding up the bank

- Robber goes into bank.
- Robber sees Cashier, Bank Manager, and Policeman.
- Robber moves to Cashier position.
- Robber grasps the gun.
- Robber moves the gun to point to cashier.
- Robber tells Cashier to give him the loot.
- Policeman tells Robber to hold it: hand up.
- Robber shoots from gun.
- Policeman shoots from a gun.
- Cashier gathers the loot to Robber.
- Cashier puts the loot in bag.
- Robber comes out of the bank from the exit gate
- Bank Manager raises the alarm.

Sense3: getaway

- Robber runs away by a getaway car.
-